

product type designation

product description



IE FC TP FRNC Cable GP 2x2 (Type B)

Flexible halogen-free bus cable acc. to IEC 60754-1/2 (4-core), sold by the meter, unassembled

Industrial Ethernet FC TP FRNC GP cable TP installation cable for connection to FC outlet RJ45, 4-core, shielded, Cat5, sold by the meter, delivery unit max. 4000 m, minimum order quantity 20 m .

suitability for use

For occasionally moved machine parts

cable designation

L-9YH (ST) CH 2x2x0,34/1,5-100 GN VZN FRNC SF/UTP

electrical data

attenuation factor per length	
• at 10 MHz / maximum	0.06 dB/m
• at 100 MHz / maximum	0.22 dB/m
impedance	
• at 1 MHz ... 100 MHz	100 Ω
relative symmetrical tolerance	
• of the characteristic impedance at 1 MHz ... 100 MHz	15 %
near-end crosstalk per length	
• at 1 MHz ... 100 MHz	0.5 dB/m
transfer impedance per length / at 10 MHz	10 mΩ/m
loop resistance per length / maximum	120 mΩ/m
operating voltage	
• RMS value	80 V
NVP value in percent	66 %

mechanical data

number of electrical cores	4
design of the shield	Overlapped aluminum-clad foil, sheathed in a braided screen of tinned copper wires
type of electrical connection / FastConnect	Yes
core diameter	
• of AWG22 insulated conductor	0.75 mm
outer diameter	
• of inner conductor	0.75 mm
• of the wire insulation	1.5 mm
• of the inner sheath of the cable	3.9 mm
• of cable sheath	6.5 mm
symmetrical tolerance of the outer diameter / of cable sheath	0.2 mm
material	
• of the wire insulation	PP
• of the inner sheath of the cable	FRNC
• of cable sheath	FRNC
color	
• of the insulation of data wires	white/yellow/blue/orange
• of cable sheath	green

bending radius	
<ul style="list-style-type: none"> • with single bend / minimum permissible • with multiple bends / minimum permissible 	39 mm 97.5 mm
tensile load / maximum	150 N
weight per length	68 kg/km
ambient conditions	
ambient temperature	
<ul style="list-style-type: none"> • during operation • during storage • during transport • during installation • note 	-25 ... +70 °C -40 ... +75 °C -40 ... +75 °C 0 ... 50 °C Electrical properties measured at 20 °C, tests according to DIN VDE 0472
fire behavior	flame resistant according to IEC 60332-3-22 (Category A/F), IEC 61034-2
chemical resistance	
<ul style="list-style-type: none"> • to mineral oil • to grease • to water 	oil resistant according to IEC 60811-2-1 (4 h / 70°C) Conditional resistance conditional resistance
radiological resistance / to UV radiation	resistant
product features, product functions, product components / general	
product feature	
<ul style="list-style-type: none"> • halogen-free • silicon-free • low-emission according to IEC 61034-2 	Yes; halogen-free according to IEC 60754-1/2 Yes Yes
wire length / for Industrial Ethernet	
<ul style="list-style-type: none"> • with 100BaseTX 	100 m
standards, specifications, approvals	
UL/ETL listing / 300 V Rating	Yes; c(ETL)us, CMG / PLTC / Sun Res / OIL RES
UL/ETL style / 600 V Rating	Yes
certificate of suitability	
<ul style="list-style-type: none"> • EAC approval • CE marking • RoHS conformity 	Yes Yes Yes
standard for structured cabling	Cat5e
Marine classification association	
<ul style="list-style-type: none"> • American Bureau of Shipping Europe Ltd. (ABS) • French marine classification society (BV) • Det Norske Veritas (DNV) • Germanische Lloyd (GL) • Lloyds Register of Shipping (LRS) • Nippon Kaiji Kyokai (NK) • Polski Rejestr Statkow (PRS) 	No No No No No No No
reference code	
<ul style="list-style-type: none"> • according to IEC 81346-2 • according to IEC 81346-2:2019 	WG WGB
further information / internet-Links	
Internet-Link	
<ul style="list-style-type: none"> • to web page: selection aid TIA Selection Tool • to website: Industrial communication • to website: Industry Mall • to website: Information and Download Center • to website: Selection guide for cables and connectors • to website: Image database • to website: CAx-Download-Manager • to website: Industry Online Support 	http://www.siemens.com/tia-selection-tool http://www.siemens.com/simatic-net https://mall.industry.siemens.com http://www.siemens.com/industry/infocenter https://sie.ag/2QdlxcP http://automation.siemens.com/bilddb http://www.siemens.com/cax https://support.industry.siemens.com
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